



Manitoba Health Statistical Update on HIV/AIDS

January 1985 – December 2006

**Communicable
Disease Control Unit
Public Health**

MANITOBA HEALTH STATISTICAL UPDATE ON HIV 1985 TO 2006

HIV – January 1, 1985 to December 31, 2006

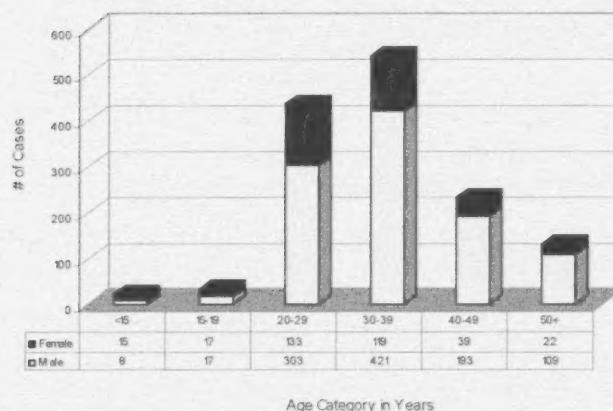
Between January 1, 2006 and December 31, 2006, 83 newly diagnosed cases of HIV were reported in Manitoba; 51 males and 32 females, bringing the total number of cases to 1396 since 1985. While females represent 25% of all HIV cases reported since 1985, comparing the 1985-1995 time period to the 1996-2006 time period, the proportion of newly diagnosed HIV cases that are female has almost quadrupled. Between 1996 and 2006, females accounted for a third of all new HIV cases (301/876), compared to 8% (44/520) between 1985 and 1995. The majority of cases, both male and female, were between the ages of 20 and 39 years.

Table 1
ANNUAL NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE, 1985-2006

Year	Male	Female	Total
1985	3	0	3
1986	70	0	70
1987	50	3	53
1988	37	4	41
1989	57	3	60
1990	40	3	43
1991	33	6	39
1992	39	6	45
1993	55	4	59
1994	50	6	56
1995	42	9	51
1996	37	16	53
1997	59	17	76
1998	53	18	71
1999	51	20	71
2000	38	19	57
2001	39	26	65
2002	41	28	69
2003	69	41	110
2004	63	42	105
2005	74	42	116
2006	51	32	83
Total	1051	345	1396

Figure 1

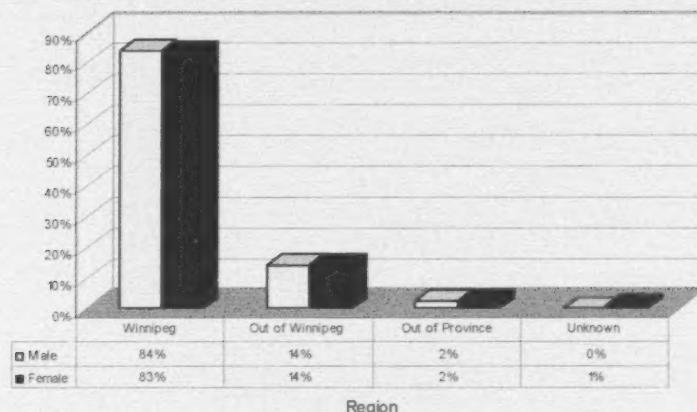
Total Number of Individuals Testing HIV Antibody Positive by Age and Sex
in Manitoba, 1985-2006



Between 1985 and December 31, 2006, 84% (1168/1396) of all HIV cases at the time of testing reported being residents of Winnipeg, while 14% (195/1396) of cases resided in Manitoba but outside of Winnipeg. Of the total cases, 2% (31/1396) of individuals were from out of province while <1% (2/1396) of individuals reported missing or unknown geographic information.

Figure 2

Proportion of HIV Positive Infections Identified in Manitoba by Region of Residence and Sex, 1985-2006



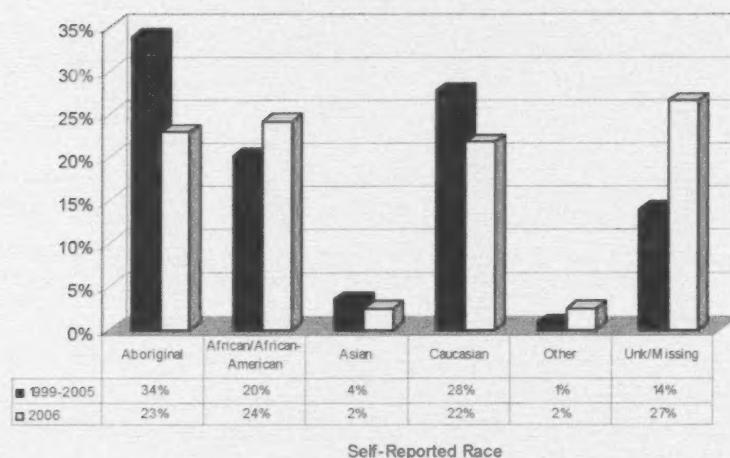
Self-Reported Ethnicity

In 2006, 24% (20/83 cases) of newly diagnosed cases of HIV in Manitoba were self-reported as African/African-American at the time of follow-up, 23% (19/83 cases) were self-reported as Aboriginal and 22% (18/83) were self-reported as Caucasian. The most commonly reported risk factor among self-reported African/African-Americans was endemic¹ (19/20; 95%). For Aboriginals, the majority of individuals reported heterosexual activity with person(s) at increased risk of HIV (14/19 cases; 74%) and the majority of Caucasians reported MSM² (10/18; 56%).

Between January 1999 and December 2006, the majority of new HIV cases self-reported as Aboriginal (220/676 cases; 33%), Caucasian (182/676 cases; 27%) and African/African-Canadian (139/676 cases; 21%). Proportional changes by ethnicity can be seen in the graph below.

Figure 3

Proportion of HIV Positive Cases Identified in Manitoba Race in Manitoba, January 1999 to December 2004 and January to December 2006



¹ Endemic includes persons originating from or residing in countries with a high prevalence of HIV.

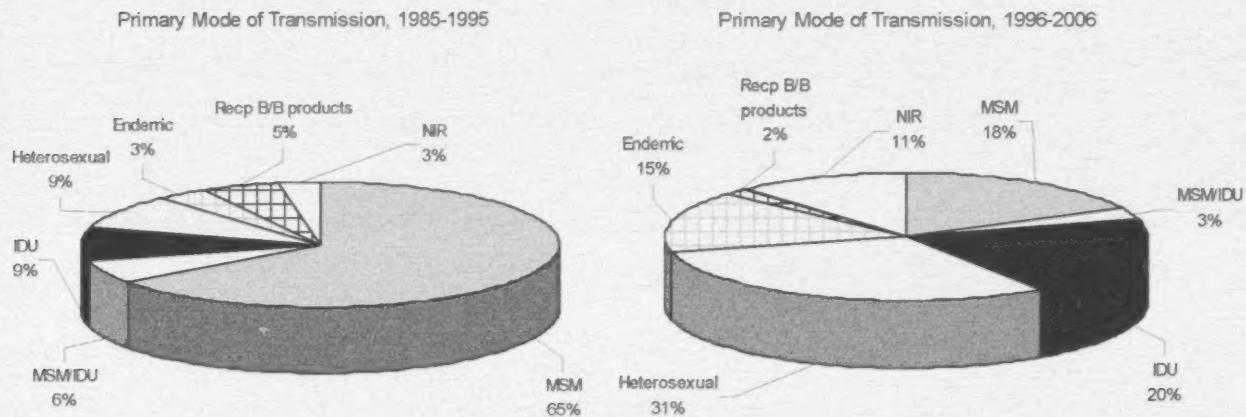
² Men who have sex with men.

HIV Exposure Categories

Of the 32 females testing HIV positive between January 1, 2006 - December 31, 2006, the predominant primary exposure categories were having lived/traveled in an HIV endemic country (13/32 cases; 41%) and sex with men who are at an increased risk of HIV (9/32 cases; 28%). Of the 51 males testing HIV positive in the same time period, the predominant primary exposure categories were having sex with men at an increased risk of HIV that had no evidence of IDU (13/51; 25%). Note that no identified risk was reported for 28% (9/32) of females and 27% (14/51) of males.

The two pie charts below show reported primary modes of transmission among newly identified HIV cases in Manitoba (1985-1995; 1996-2006).

Figure 4



*Due to the hierarchical assignment of primary mode of transmission, Blood/Blood Product exposures are difficult to verify.

As can be seen, the proportion of MSM without evidence of IDU decreased from 65% (337/520) in the first time period (1985-1995) to 18% (155/876) in the second time period (1996-2005). The largest increases (in terms of raw percentage) between the two time periods were seen in the Heterosexual (+22%), IDU (+12%) and Endemic (+12%) exposure categories. As with ethnicity data, exposure categories are determined by self-report and are subject to the same limitations. Although completion rate for this variable is better than for ethnicity, it is important to note that from January 1985 to December 2006, 8% (114/1396) of positive HIV cases had no identified exposure category.

MSM: men having sex with men

IDU: injection drug use

Heterosexual: includes persons reporting heterosexual activity with person(s) at risk of HIV infection

Endemic: includes persons originating from or having traveled from or resided in an HIV-endemic country

Recp B/B products: recipient of blood/blood products

NIR: no identified risk

AIDS – January 1, 1985 to December 31, 2006

Please note that this report describes AIDS cases based on year of diagnosis of their first AIDS defining illness and not the year that the individual was reported to Manitoba Health as done in previous years.

In 2006, 13 new cases of AIDS were identified; 9 cases were female and 4 cases were male. These case reports bring the total number of AIDS cases to 258 since 1985. The number of reported AIDS cases has declined somewhat over recent years, due in part to early diagnosis and improved treatment of individuals with HIV infection. Seventy-four percent of individuals reported with AIDS have died; however, delays in reporting of both cases and deaths make it difficult to determine the actual incidence and mortality rates.

Further description of AIDS cases can be found in Appendix D.

APPENDIX A

Reporting of HIV and AIDS in Manitoba

In Manitoba, the expansion of HIV antibody testing occurred in January 1, 2007 with the introduction of nominal and anonymous testing in addition to the existing non-nominal testing option. Expansion of testing options in the province reflects the importance of early detection and demonstrates Manitoba's commitment to reducing the spread of HIV. Information on the three testing methods can be found in the *HIV Antibody Testing Information and Guidelines for Health Practitioners* document located at <http://www.gov.mb.ca/health/publichealth/cdc/surveillance/hivantibodytesting.pdf>.

All confirmatory HIV antibody testing is carried out at Cadham Provincial Laboratory (CPL). Positive test results are subsequently reported to the Director of Communicable Disease Control as required by the *Diseases and Dead Bodies Regulation, Public Health Act*. It has been the practice of the Communicable Disease Control (CDC) Unit to enter case investigation information into the provincial HIV Database after the physician (requesting the test) has verified the test result as a new or existing case. However, there have been delays in the completion of and return of the *Notification of HIV Infection Form* by health care professionals. Consequently, all HIV positive test results are considered new cases unless otherwise advised by the appropriate health care professional. This practice will avoid the underreporting of HIV in Manitoba, although, duplicate cases may be included.

Twice a year, line-listed data from the provincial HIV database are extracted and forwarded to the Centre for Infectious Disease Prevention and Control, Public Health Agency of Canada for inclusion within the national report, *HIV and AIDS in Canada*. Although non-nominal, the prescribed patient code is stripped prior to release. Instead, a sequential case number assigned by the database is used to distinguish one case from another.

Provincially, AIDS cases and deaths are reportable by physicians. The national *HIV/AIDS Case Report Form* is used for this purpose. New AIDS cases and deaths are reported to the Director of Communicable Disease Control and subsequently data are electronically forwarded to the Centre for Infectious Disease Prevention and Control on a quarterly-basis. The Centre works diligently with other provinces to ensure that there are no duplications in the counting of cases.

The variations seen from previous provincial reports with respect to the number of AIDS cases and deaths may be accounted for by delays in reporting as well as the fact that in Manitoba, the database is updated immediately once surveillance staff are notified that a particular case has been accounted for in another province.

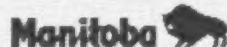
APPENDIX B

CDC Case ID Number _____

Case Lab Req Number _____

Prenatal Screen

**Manitoba Health
HIV Case Investigation Form**



Specimen Collection Date (YYYY/MM/DD) _____

Nominal Testing

Surname _____ Given Name _____
 PHIN (9 digits) _____ Sex: M F
 MHSC Number (6 digits) _____ Birth Date (YYYY/MM/DD) _____
 Street Address _____ City/Town _____ Province _____ Postal Code _____
 Alternate Locating Information _____ Telephone (home/work/cell) _____

OR

Non-Nominal Testing

Non-Nominal HIV Code _____

Ethnicity

<input type="checkbox"/> Caucasian	<input type="checkbox"/> Aboriginal (specify) _____
<input type="checkbox"/> Black (i.e., African, Haitian, Jamaican, etc.)	<input type="checkbox"/> First Nation on Reserve
<input type="checkbox"/> Asian (i.e., Chinese, Filipino, Japanese, etc.)	<input type="checkbox"/> First Nation off Reserve
<input type="checkbox"/> South Asian (i.e., East Indian, Pakistani, Sri Lankan, etc.)	<input type="checkbox"/> Métis
<input type="checkbox"/> Arab/West Asian (i.e., Armenian, Egyptian, Iranian, etc.)	<input type="checkbox"/> Inuit
<input type="checkbox"/> Latin American	<input type="checkbox"/> Other (specify) _____
	<input type="checkbox"/> Refused to answer

Country of Birth

Canada Other (specify) _____ Year of arrival (YYYY) _____

Risk Factors (check all that apply)

Sex with: <input type="checkbox"/> men <input type="checkbox"/> women <input type="checkbox"/> both	<input type="checkbox"/> vaginal sex <input type="checkbox"/> anal sex <input type="checkbox"/> oral sex
<input type="checkbox"/> sex with multiple partners (number) _____	<input type="checkbox"/> injection drug use (IDU) _____
<input type="checkbox"/> sex trade worker _____	<input type="checkbox"/> IDU outside Canada (country) _____
<input type="checkbox"/> sex with sex trade worker _____	<input type="checkbox"/> born to HIV-infected mother _____
<input type="checkbox"/> sex with anonymous partner _____	<input type="checkbox"/> recipient of blood/blood products prior to 1985 _____
<input type="checkbox"/> sex with bisexual partner _____	<input type="checkbox"/> recipient of blood/blood products outside Canada (country) _____
<input type="checkbox"/> sex with person(s) who use injection drugs _____	<input type="checkbox"/> occupational exposure _____
<input type="checkbox"/> sex with known/suspected HIV-positive person _____	<input type="checkbox"/> victim of sexual assault _____
<input type="checkbox"/> sex with person from HIV-endemic country (country) _____	<input type="checkbox"/> other _____
<input type="checkbox"/> sex outside Canada (country) _____	

Number of sexual contacts in the past year _____

Number of IDU contacts in the past year _____

Date of last sexual exposure (LSE) (YYYY/MM/DD) _____

Date of last IDU exposure (YYYY/MM/DD) _____ N/A

Drug use during LSE (check all that apply): alcohol IDU methamphetamine other _____ N/A

In the past year:

<input type="checkbox"/> did you use condom?	<input type="checkbox"/> always	<input type="checkbox"/> most of the time	<input type="checkbox"/> some of the time	<input type="checkbox"/> never	<input type="checkbox"/> N/A
<input type="checkbox"/> did you share injection equipment?	<input type="checkbox"/> always	<input type="checkbox"/> most of the time	<input type="checkbox"/> some of the time	<input type="checkbox"/> never	<input type="checkbox"/> N/A

Disease Reporting and Clinical Standards Information

As per Manitoba Health protocol, individuals with HIV should be tested for associated STI and EBB:

Type	Tests Performed on Case			Treatment Given to Case			Date (YYYY/MM/DD)	
GC	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A
CT	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A
Syphilis	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A
HBV	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> Immune _____ Vaccinated
HCV	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Refused	<input type="checkbox"/> N/A

Past History (complete if applicable)

Date of first positive HIV test (YYYY/MM/DD) _____ Where tested positive (province/country) _____

Date of last negative HIV test (YYYY/MM/DD) _____

Previous anti-retroviral therapy: Yes No

Previous blood/tissue donation: Yes No If Yes, most recent date (YYYY/MM/DD) _____ Hospital name _____

Has client been informed of test result? Yes No

Has client been referred to HIV specialist or ID physician? Yes No

Has client been informed of his/her legal obligation to notify current and future contacts of HIV status? Yes No

Contact notification to be completed by: Public Health Health Practitioner Client

Number of contacts to be followed (please complete separate contact notification form for each client) _____

Form completed by (print name) _____ Telephone Number _____

Signature _____ Form completion date (YYYY/MM/DD) _____

December 2006

APPENDIX C
HIV Descriptive Tables

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE IN MANITOBA
 BY AGE CATEGORY, SEX AND YEAR OF DIAGNOSIS

Age Category	Sex	2006	2005	1985-2004	1985-2006
<15	M	0	1	7	8
	F	2	2	11	15
15-19	M	0	1	16	17
	F	3	1	13	17
20-29	M	9	15	279	303
	F	5	14	114	133
30-39	M	22	21	378	421
	F	18	15	86	119
40-49	M	11	23	159	193
	F	1	6	32	39
50+	M	9	13	87	109
	F	3	4	15	22
Total	M	51	74	926	1051
	F	32	42	271	345

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE IN MANITOBA
 BY GEOGRAPHIC RESIDENCE, SEX AND YEAR OF DIAGNOSIS

RHA	Sex	2006	2005	1985-2004	1985-2006
Assiniboine	M	0	2	3	5
	F	0	1	0	1
Brandon	M	1	0	4	5
	F	1	0	1	2
Brandon and Assiniboine	M	0	0	17	17
	F	0	0	1	1
Burntwood	M	1	3	10	14
	F	2	4	3	9
Central	M	3	3	35	41
	F	0	0	15	15
Interlake	M	1	1	30	32
	F	1	1	5	7
Norman	M	0	0	5	5
	F	0	0	1	1
North and South Eastman	M	0	0	11	11
	F	0	0	2	2
North Eastman	M	0	4	6	10
	F	0	3	3	6
Parkland	M	1	0	4	5
	F	1	0	2	3
South Eastman	M	0	0	2	2
	F	0	0	1	1
Winnipeg	M	44	60	777	881
	F	27	32	228	287
Non-Resident	M	0	1	22	23
	F	0	1	7	8
Unknown	F	0	0	2	2
	M	51	74	926	1051
Total	F	32	42	271	345

**NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE IN MANITOBA
BY SELF-REPORTED ETHNICITY AND YEAR OF DIAGNOSIS**

Ethnic Category	2006	2005	1985-2004	1985-2006
Aboriginal	19	30	172	221
African/African-American	20	35	85	140
Asian	2	5	16	23
Caucasian	18	34	140	192
Other	2	0	5	7
Unknown/Missing	22	12	779	813
Total	83	116	1197	1396

**NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE IN MANITOBA BY PRIMARY MODE OF
TRANSMISSION, SEX AND YEAR OF DIAGNOSIS**

Mode	Sex	2006	2005	1985-2004	1985-2006
MSM	M	15	18	459	492
MSM/IDU	M	0	4	51	55
IDU	M	2	6	126	134
	F	1	5	82	88
Heterosexual	M	13	21	155	189
	F	9	14	103	126
Endemic	M	7	15	49	71
	F	13	19	49	81
Recp B/B products	M	0	0	30	30
	F	0	2	10	12
Perinatal	M	0	0	2	2
	F	0	0	1	1
Occupational	M	0	1	0	1
NIR	M	14	9	54	77
	F	9	2	26	37
Total	M	51	74	926	1051
	F	32	42	271	345

MSM: men having sex with men

IDU: injection drug use

Heterosexual: includes persons reporting heterosexual activity with person(s) at risk of HIV infection

Endemic: includes persons originating from or having traveled from or resided in an HIV-endemic country

Recp B/B products: recipient of blood/blood products

NIR: no identified risk

APPENDIX D

AIDS Descriptive Tables

NUMBER OF REPORTED AIDS CASES AND DEATHS IN MANITOBA BY YEAR OF DIAGNOSIS

Year	Cases Reported	Deaths Reported
1985	1	1
1986	13	13
1987	9	9
1988	5	5
1989	16	13
1990	10	10
1991	26	21
1992	15	13
1993	15	13
1994	16	12
1995	15	12
1996	15	9
1997	4	3
1998	10	7
1999	12	9
2000	9	9
2001	9	6
2002	12	5
2003	16	8
2004	9	4
2005	8	3
2006	13	7
Total	258	192

NUMBER OF REPORTED AIDS CASES IN MANITOBA BY AGE CATEGORY, SEX AND YEAR OF DIAGNOSIS

Age Category	Sex	2006	2005	1985-2004	1985-2006
<15	M	0	0	2	2
	F	1	0	1	2
15-19	M	0	0	1	1
20-29	M	1	1	32	34
	F	0	0	6	6
30-39	M	3	0	100	103
	F	6	1	11	18
40-49	M	0	3	44	47
	F	1	1	8	10
50+	M	0	2	29	31
	F	1	0	3	4
Total	M	4	6	208	218
	F	9	2	29	40

NUMBER OF REPORTED AIDS CASES IN MANITOBA BY GEOGRAPHIC RESIDENCE,
SEX AND YEAR OF DIAGNOSIS

RHA	Sex	2006	2005	1985-2004	1985-2006
Assiniboine	M	0	0	3	3
Brandon	M	1	0	4	5
Burntwood and Churchill	M	0	0	1	1
	F	0	1	2	3
Interlake	M	0	0	4	4
Norman	M	0	0	2	2
North Eastman	F	0	0	1	1
	M	0	0	3	3
	F	0	0	1	1
South Eastman	M	0	0	1	1
	M	3	6	187	196
	F	9	1	25	35
Non Resident	M	0	0	3	3
	M	4	6	208	218
	F	9	2	29	40

NUMBER OF REPORTED AIDS CASES IN MANITOBA BY PRIMARY MODE OF TRANSMISSION,
SEX AND YEAR OF DIAGNOSIS

Mode	Sex	2006	2005	1985-2004	1985-2006
MSM	M	2	3	134	139
MSM/IDU	M	0	0	10	10
	M	1	0	18	19
	F	3	0	8	11
	M	0	3	24	27
Heterosexual	F	3	2	12	17
	M	0	0	3	3
	F	3	0	6	9
	M	0	0	1	1
Perinatal	F	0	0	1	1
	M	0	0	15	15
	F	0	0	2	2
BBP	M	1	0	3	4
	F	0	0	208	218
NIR	M	4	6	29	40
	F	9	2		

MSM: men having sex with men

IDU: injection drug use

Heterosexual: includes persons reporting heterosexual activity with person(s) at risk of HIV infection

Endemic: includes persons originating from or having traveled from or resided in an HIV-endemic country

Recp B/B products: recipient of blood/blood products

NIR: no identified risk